

IN THE CLAIMS

1. (Amended) A neurosurgical device for thermally affecting interior cranial tissue of a patient, the device comprising:

a housing, the housing defining an interior volume and being at least partially insertable into an exterior opening in the patient; and

a thermal member having a thermal input side and a thermal output side, at least a portion of the thermal member being positioned within the interior volume, one of the thermal input side and the thermal output side being arrangerable to provide a temperature different than the other of the thermal input side and the thermal output side, the thermal input side imparting a thermal change to the interior cranial tissue.

2. (Amended) The device of claim 1, further comprising, a contact member being in thermal communication with the thermal input side of the thermal member and being in thermal communication with the interior cranial tissue.

3. (Amended) The device of claim 1, further comprising a ~~thermal fluid circulation member, the thermal fluid circulation member provided to circulate thermal fluid across the thermal output side of the thermal member~~ a membrane for contact with the interior cranial tissue, the membrane being in thermal contact with the contact member.

4. (Amended) The device ~~according to~~ of claim 1, further comprising a surface area expansion element, the surface area expansion element having an interior volume which ~~can be filled~~ is fillable with a thermally-transmissive fluid, the thermally-transmissive fluid being in thermal communication with the thermal member.

5. (Original) The device according to claim 4, wherein the surface area expansion element has a width measured at a widest part and a height measured from a top to a tissue contact area, the width being at least twice the height.

6. (Original) The device according to claim 5, further comprising a fluid circulation element, the fluid circulation element including a circulation member and a distribution member.

7. (Original) The device according to claim 6, wherein the circulation member is a pump and the distribution member is at least one injection member.

8. (Amended) The device according to claim 1, wherein the thermal member is configured to directly contact internal cranial tissue to be treated.

9. (Amended) The device according to claim 2, wherein the contact member is configured to directly contact internal cranial tissue to be treated.

10. (Original) The device according to claim 1, further comprising a protective barrier, the protective barrier being disposed on and being in thermal communication with the thermal member.

11. CANCELLED

12. CANCELLED

13. (Original) The device according to claim 1, further comprising a temperature sensor, the temperature sensor measuring a temperature of the interior cranial tissue to be treated.

14. (Amended) The device according to claim 1, further comprising a pressure sensor, the pressure sensor measuring a pressure of the interior cranial tissue to be treated.

15. (Amended) The device according to claim 1, further comprising a temperature sensor, the temperature sensor measuring a temperature of the interior cranial tissue to be treated.

16-25. CANCELLED

26. (Amended) A device for thermally affecting tissue, comprising:
a thermal member having a thermal input side and a thermal output side;
a thermal cartridge, the thermal cartridge having a cartridge wall defining an interior surface for receiving the thermal member; ~~and~~
an insert housing, the insert housing having an insert wall defining an inner volume configured to slidably receive the thermal cartridge and the insert housing being configured to fit within an opening in a patient;
a contact member in thermal communication with the thermal input side of the thermal member; and
a thermal bridge provided between and in thermal communication with the thermal member and the contact member.

27-37. CANCELLED

Please add new Claims 38-40 as follows:

38. A device for thermally affecting tissue, comprising:
a thermal member having a thermal input side and a thermal output side;
a thermal cartridge, the thermal cartridge having a cartridge wall defining an interior surface for receiving the thermal member;
an insert housing, the insert housing having an insert wall defining an inner volume configured to slidably receive the thermal cartridge and the insert housing being configured to fit within an opening in a patient;
a thermal dissipation member in thermal communication with the thermal member; and
a thermal bridge provided between and in thermal communication with the thermal member and the thermal dissipation member.

39. A method of affecting a thermal change in cranial tissue, the method comprising:
inserting at least a part of a housing into an exterior opening in the cranium of a patient, the housing defining an interior volume;
positioning at least a portion of the thermal member within the interior volume of the housing, the thermal member having a thermal input side and a thermal output side, one of the thermal input side and the thermal output side being arrangable to provide a temperature different than the other of the thermal input side and the thermal output side; and
using the thermal input side to impart a thermal change to the cranial tissue.

40. The method according to claim 18, wherein the cranial tissue is dura mater, the method further comprising exposing the cranial tissue at least by creating a burr hole in the skull.

Please cancel Claims 11, 12, 16-25 and 27-37 without prejudice and without disclaimer of subject matter.